



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/555,044

10/28/2005

Thanh Van Do

OSL-028

2304

7590  
Thomas Schneck  
Schneck & Schneck  
P O Box 2-E  
San Jose, CA 95109-0005

12/22/2009

EXAMINER

AJIBADE AKONAI, OLUMIDE

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

12/22/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/555,044	<b>Applicant(s)</b> DO ET AL.	
	<b>Examiner</b> OLUMIDE T. AJIBADE AKONAI	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19,21-31 and 33-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 is/are allowed.
- 6) ☒ Claim(s) 18,19,21-31 and 33-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 8 2009 has been entered.

### ***Allowable Subject Matter***

2. The indicated allowability of claims 20-23 and 32 is withdrawn in view of a different interpretation of previously discovered reference(s) and new grounds of rejection. Rejections based on the cited reference(s) and new grounds of rejection follow.

Claims 1-17 are allowed.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18, 19, 21-35 and 38-41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to

Art Unit: 2617

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

**Claim 18**, discloses a “fourth device in communication with the second device wherein said second device is on a network external to said first and third devices” on lines 14-16. However lines 4-7 also disclose “said second communication device and at least one third communication device forming a personal area network”. The specification discloses both limitations, but in different embodiments. Pages 15-16 of the Applicants’ specification and figures 8 and 9 clearly disclose a “said second communication device and at least one third communication device forming a personal area network” (page 16, lines 16-27 and figure 9) and “fourth device in communication with the second device wherein said second device is on a network external to said first and third devices” (page 15, lines 37, page 36, lines 1-9, and figure 8). However, both limitations represent different embodiments of the invention (figure 8 discloses virtual device on networked PAN without open device, figure 9 discloses virtual device on network PAN with open device).

It is not clear and adequately disclosed how the second device forms a personal area network PAN with the third device and is on a network external said third device as disclosed in claim 18. This limitation is not supported by the specification and constitutes new matter. The examiner respectfully requests that the applicants provide page(s), line(s), and figure(s) that supports this limitation of the claim.

Claims 19 and 21-35 are rejected by virtue of their dependency on claim 18.

Claim 38 is rejected under 35 U.S.C. 112, first paragraph for the same reasons

Art Unit: 2617

indicated for the 35 U.S.C. 112, first paragraph rejection of claim 18 above, as claim 38 is directed to the same limitations as claim 18. Claims 39-41 are rejected by virtue of their dependency on claim 18.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 36, 37 and 42-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fitton et al 7,346,369 (hereinafter Fitton)** in view of **Thanh et al "The Device Management Service"** and **Haller et al 7,039,033 (hereinafter Haller)**

Regarding **claim 36**, Fitton discloses a system, comprising: at least one first device capable of transmitting a first output stream via a first communication interface (laptop 12 receives a paging request for phone 100, indicating presence of at least a first device transmitting to the laptop 12, see fig. 1, col. 6, lines 1-12); a second device comprising a second communication interface capable of receiving said first output stream (laptop 12 receives a paging request for phone 100, see fig. 1, col. 6, lines 1-12), said second device and at least one third device (phone 100, see fig. 1, col. 5, line 56) forming a Personal Area Network (see fig. 1, col. 5, lines 55-58); a Personal Area Network middleware, executed by at least said second device (WPAN module 103, see fig. 1, col. 5, lines 55-58),

Fitton does not specifically disclose the second device storing at least a user profile including redirection information for said at least one third device of the Personal Area Network, and arranged to intercept and redirect said first output stream to an input port of a third device based on said redirection information.

In the same field of endeavor, Thanh et al discloses a storing at least a user profile including redirection information for said at least one third device of a Personal Area Network (virtual terminal storing user profile information such that input and output stream is redirected from one device to another device based on the stored information, see figure 17, page 202, second column, lines 13-19, page 205, second

Art Unit: 2617

column, lines 22-28 and page 209, lines 1-13), and arranged to intercept and redirect said first output stream to an input port of a third device based on said redirection information (redirecting input and output streams, see figure 17, page 202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Thanh et al, by having the WPAN device of Fitton store profile information of other devices in the WPAN network and redirect input and output streams between the other WPAN devices for the benefit of switching/changing devices that receive input/output streams in a WPAN network.

Fitton as modified by Thanh et al does not specifically disclose wherein said user profile further comprises means for presenting which of said first, second and third devices are visible on an external network.

In the same field of endeavor, Haller discloses a wireless personal area network WPAN comprises a plurality of communication devices (PAN comprising devices 106 and 107 see fig. 1, col. 4, lines 15-20), wherein one of the wireless communication devices comprises PAN middleware (wireless gateway device 106 with PAN software, see col. 4, lines 48-49, col. 5, lines 19-27 and 61-65, col. 6, lines 36-42); and wherein the PAN middleware allows the wireless gateway device 106 to be visible to external network/WAN while the other devices 107 that are connected to the wireless gateway device 106 in the personal area network are not visible to the external network/WAN (wireless gateway device 106 comprising PAN software serves as the interface of the devices 107 in the PAN to the WAN, the device 106 storing PAN router

Art Unit: 2617

software for establishing communication for the devices 107 for access to IP services in the WAN; and wherein the other devices 107 in the PAN cannot access the WAN directly, see fig. 4, col. 6, lines 58-67, col. 7, lines 13-36, col. 8, lines 64-67, col. 9, lines 1-24).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Haller in the system of Fitton as modified by Thanh et al by storing personal area network software on one device from a plurality of devices in a WPAN network for the benefit of having the other devices transmitting/receiving signals from an external network via the one device without the other devices having to directly communicate with the external network.

Regarding **claim 37** as applied to claim 36 Fitton as modified by Thanh and Haller disclose the claimed limitation. Thanh further discloses further comprising a user interface application enabling a user to control said Personal Area Network middleware and manage said redirection information (see figure 17, page 202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13).

Regarding **claim 42** as applied to claim 36, Fitton as modified by Thanh and Haller disclose the claimed limitation. Fitton further discloses further comprising at least one other second device, wherein said Personal Area Network middleware is distributed among said second devices (see col. 5, lines 55-58).

Regarding **claim 43** as applied to claim 42, Fitton as modified by Thanh and Haller discloses the claimed limitation. Thanh further discloses wherein said Personal Area Network middleware is distributed using XML Web services (see figure 17, page



Art Unit: 2617

202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13).

Regarding **claim 44** as applied to claim 36, Fitton as modified by Thanh and Haller discloses the claimed limitation. Thanh further discloses wherein said first output stream is generated by a first application, said system further comprising a second application generating a second output stream, said second output stream being redirected by said Personal Area Network middleware to a third device other than that to which said first output stream is redirected (see figure 17, page 202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13).

Regarding **claim 45** as applied to claim 36, Fitton as modified by Thanh and Haller disclose the claimed limitation. Fitton further discloses wherein said first device and said third device are selected from communication devices, computing devices, peripheral devices, electronic devices or electronic appliances (see col. 5, lines 55-58).

Regarding **claim 46** as applied to claim 36, Fitton as modified by Thanh and Haller disclose the claimed limitation. Fitton further discloses wherein at least one of said first devices and said third devices is arranged to communicate with and to act as a pure slave to other devices (see col. 5, lines 55-58).

Regarding **claim 47** as applied to claim 36, Fitton as modified by Thanh and Haller disclose the claimed limitation. Thanh further discloses wherein said Personal Area Network middleware is additionally arranged to discover and register any of said first, second, and third devices present in said Personal Area Network and to store their presence in a device profile including device information on at least identity, type,

Art Unit: 2617

capabilities and services offered by any of said first, second, or third devices (see figure 17, page 202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13).

Regarding **claim 48** as applied to claim 36, Fitton as modified by Thanh and Haller disclose the claimed limitation. Thanh further discloses wherein said user profile further comprises which of said first, second and third devices are members of said Personal Area Network (see figure 17, page 202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13).

Regarding **claim 49** as applied to claim 47, Fitton as modified by Thanh and Haller disclose the claimed limitation. Thanh further discloses wherein said user profile further comprises which of said first, second and third devices are available for said Personal Area Network (see figure 17, page 202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13).

Regarding **claim 50** as applied to claim 36, Fitton as modified by Thanh and Haller disclose the claimed limitation. Thanh further discloses wherein said user profile further comprises information regarding distribution of services and resources among said first, second and third devices present in said Personal Area Network (see figure 17, page 202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13, page 210, first column, lines 1-12).

Regarding **claim 51** as applied to claim 36, Fitton as modified by Thanh and Haller disclose the claimed limitation. Thanh further discloses wherein said Personal Area Network middleware is arranged to include an Application Programming Interface

Art Unit: 2617

enabling application access to capabilities and functions in said Personal Area Network middleware (see figure 17, page 202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13).

Regarding **claim 52** as applied to claim 51, Fitton as modified by Thanh and Haller disclose the claimed limitation. Thanh further discloses, wherein said Application Programming Interface is implemented as any of: Java, CORBA or an XML Web service (see figure 17, page 202, second column, lines 13-19, page 205, second column, lines 22-28 and page 209, lines 1-13).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sanjeev et al 20030078002 discloses a method for wireless link reestablishment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA

/Charles N. Appiah/  
Supervisory Patent Examiner, Art Unit 2617